



NORTH CAROLINA

Department of Transportation



Board of Directors Finance Committee Meeting North Carolina Turnpike Authority February 16, 2017

Refunding Analysis

David Miller

Public Financial Management



NCTA Refunding Structure Options

Triangle Expressway Revenue Bonds, Series 2009A

February 16, 2017

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Refunding Considerations

- Triangle Expressway System Senior Lien Revenue Bonds, Series 2009A
 - Currently outstanding in a par amount of \$234,910,000 (Refundable - \$234,310,000)
 - Callable January 1, 2019
- Refunding the Series 2009A Bonds would improve the TriEx Pro Forma
 - Structure to reduce annual debt service in every year which would improve coverage ratios and accumulated cash balances
 - May help to achieve improved credit ratings
- Insurance and DSRF Surety
 - Bond insurance from Assured Guaranty, the 2009 insurer, will likely reduce borrowing costs
 - Assured Guaranty will probably offer a DSRF Surety which could be used to liquidate the cash funded reserve



Refunding Criteria

- Net Present Value ("NPV") Savings
 - It's recommend to achieve at least 3.0% of NPV savings for a current refunding & higher for an advance refunding
- Negative Arbitrage – In the current market environment, the refunding escrow would earn less interest earnings than would be legally permitted resulting in significant negative arbitrage
 - Many of PFM's clients have established thresholds for negative arbitrage in addition to minimum NPV savings (i.e. maximum negative arbitrage of 50% to 100% of NPV savings).
 - Negative Arbitrage will decrease as we move closer to the call date
- Option Value – Option value can be characterized as the theoretical maximum savings to be achieved from the bonds' call option given assumed future interest rates
 - Theoretically and absent other considerations, PFM recommends refunding bonds with NPV savings as a % of option value at least in excess of 50%



Refunding Assumptions & Results

- Date Assumptions
 - Dated and Delivery Date: March 29, 2017
 - First Coupon: July 1, 2017
 - Call Date: January 1, 2027
- Interest Rate and Insurance Assumptions
 - Baseline MMD AAA index as of Feb 13 plus credit spreads
 - Uninsured: Maturities 2019 through 2027
 - Insured: Maturities 2028 through 2039
 - Insurance premium of 80 bps total debt service
 - Surety premium of 4.50% of the DSRF requirement



Debt Service Reserve Fund

- The existing DSRF was funded with cash to the initial Senior Lien Parity Reserve Requirement of \$27,008,311, which equaled 10% of par of the 2009 Bonds
- Immediately after issuance the DSRF requirement changed to 5-Year MADS on the bonds
- In tandem with the refunding, a surety may be used to satisfy the reserve requirement, so the DSRF cash funds would be released
 - Funds used as a contribution into the escrow for the refunded bonds to reduce the bond size



Structuring Scenarios

- There are options for structuring the refunding bonds to dictate when you realize cash flow savings
 - Uniform Savings: The refunding bonds amortize in a structure that mirrors the prior debt service in order to achieve approximately level debt service savings in every year
 - Deferred Savings: The refunding bonds are front loaded to fill the structure of the prior debt service and savings are realized on the back end
 - Mixed/Alternate Option – A combination of uniform and deferred savings can be achieved by realizing less savings than a pure uniform structure in the beginning years and pushing those savings into the later years.
- While there is no TIFIA loan prepayment due to the refunding, TIFIA repayment is based on 45% of cash flow after senior lien debt service, so effectively TIFIA gets paid faster due to savings



Sources & Uses

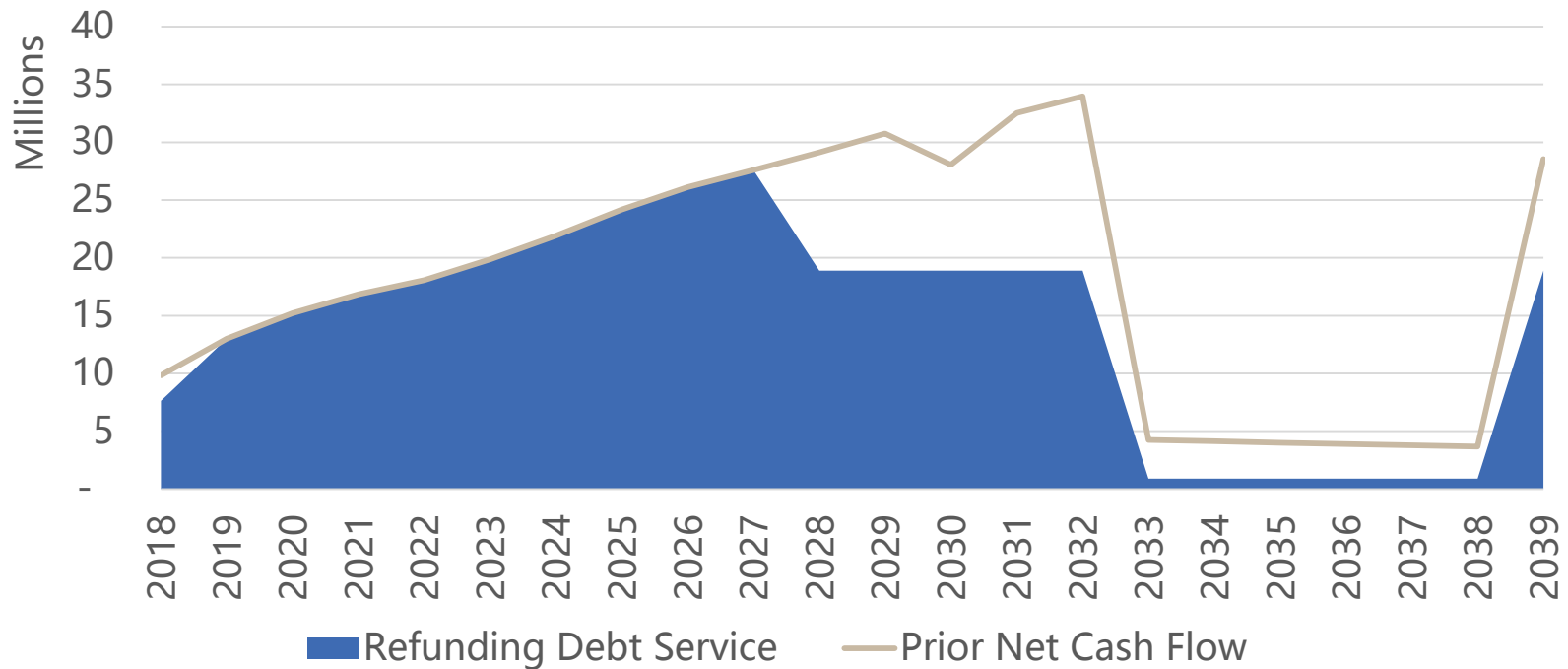
Sources	
Par Amount	201,955,000
Premium	27,536,346
DSRF Release	27,611,329
Interest Account Funds on Hand	3,180,517
	260,283,192

Uses	
Refunding Escrow Deposits	255,723,068
Insurance Premium (80 bps)	1,324,319
Surety Expense	1,215,374
Cost of Issuance	1,010,655
Underwriter's Discount	1,009,775
	260,283,192



Debt Structure & Savings

- Cash Flow Savings: \$90.2 million / 38.5%
- Adjusted NPV Savings: \$27.7 million / 11.8%
- Net DSRF Release: \$25.7 million



Thank You



Refunding Bond Documents

Wally McBride

Hunton & Williams

Refunding Bond Documents

- **Second Supplemental Trust Agreement:**
 - Between the Authority and Wells Fargo as Trustee
 - Amends the original 2009 Trust Agreement and states terms for 2017 Bonds (rate, maturity, etc.) and bond insurance if obtained
- **Escrow Agreement:**
 - Between the Authority and Wells Fargo as Escrow Agent for holders of 2009A Bonds.
 - Proceeds are invested in U.S. Treasury securities to pay interest and principal on 2009A Bonds through redemption date of 1/1/19
- **Bond Order:**
 - Short formula document to be adopted by the Authority as required by Revenue Bond Act
- **Preliminary Official Statement:**
 - Main marketing document for the 2017 Bonds
 - Describes the Project and revenues as security for the 2017 Bonds
 - Includes updates on 2009 Traffic & Revenue Study and discusses new interchanges
- **Official Statement:**
 - After sale the POS is updated with actual 2017 Bond terms and sent to purchasers

Proposed Refunding Schedule

David Roy

NCTA Director of Finance

Proposed Schedule

Date*	Action	Responsibility
2/7	LGC Update - TriEx performance and refunding considerations	NCTA
2/10	First draft of Resolution & Related Bond Documents	BC
2/13	First draft of POS	DC
2/14	Comments due on first draft of financing documents	ALL
2/16	Special NCTA Finance Committee Meeting – 9:30 AM	NCTA/FA/BC
2/17	Second draft of POS, and Resolution Send ratings package to Rating Agencies & Assured Guaranty	DC/BC FA
2/22	Comments due on second draft documents & POS	ALL
2/23-2/24	Conference Calls with Rating Agencies & Assured Guaranty	NCTA/FA/T&R
2/24	Third draft of POS and Resolution	BC/DC
3/1	Comments due on POS third draft	ALL
TBD	Special NCTA Finance Committee Meeting	NCTA/FA/BC
	Special NCTA Board Meeting	NCTA/FA/BC
3/3	Receive credit ratings, insurance premium & insurer consent	NCTA/FA
	LGC Meeting – Approval of Refunding	NCTA/FA/BC
3/7	Final POS and Resolution sign off	ALL
	Provide POS & updated cash flow projections to TIFIA	NCTA/FA/BC
3/8	Print/Post POS	DC
3/15	Negotiated Sale	NCTA /UW/FA
3/28	Pre-Closing	ALL
3/29	Closing	ALL

*Preliminary, subject to change

NCTA	North Carolina Turnpike Authority
BC	Bond Counsel – Hunton & Williams
DC	Disclosure Counsel - McGuireWoods LLP
UW	Underwriter – TBD
FA	Financial Advisor – PFM Financial Advisors LLC
VA	Verification Agent – TBD
T&R	Traffic and Revenue Consultant – CDM Smith
ALL	Working Group – All of the above

Underwriters Selection

David Roy

NCTA Director of Finance

Underwriters Selection Process

Request for Qualifications:

- Solicited Investment Banking firms to assist the Authority in completing the issuance of Monroe Expressway Toll Revenue Bonds and potentially future project bonds.

Schedule:

- April 7: Request for Qualifications advertised
- April 27: Statements of Qualifications due to the Authority
 - 9 firms proposed to serve as Senior Manager and 3 proposed to serve as a Co-Manager
- May 6: Selection Committee meeting to shortlist firms
 - 4 firms proposing to serve as Senior Manager shortlisted
- June 6: Oral presentations and interviews for shortlisted firms
- June 6: Selection Committee meeting to select recommended Underwriters

Selection Committee:

- David Tyeryar, NCDOT CFO
- David Roy, NCTA
- David Miller, PFM
- Wally McBride, Hunton & Williams

Underwriters Selection

- At June 15, 2016 Authority Board meeting, the NCTA Board voted to select the following underwriting team for the Monroe Expressway transaction:

Senior Managing Underwriter:

- Bank of America Merrill Lynch

Co-Managing Underwriters:

- Citigroup Global Markets
 - J.P. Morgan Securities
 - Wells Fargo Securities
- Selection Committee recommends engaging the same team for the proposed Triangle Expressway Refunding Revenue Bonds, Series 2017

Draft Finance Committee Resolution

Wally McBride

Hunton & Williams

Draft Finance Committee Resolution

Subject to the understanding that further approval and confirmation by this committee or the Board of the Authority are required for any final action, the officers and staff of the Authority in connection with the proposed refunding and defeasance of substantially all of the Series 2009A Bonds through the issuance of the Series 2017 Bonds, are authorized:

- to preliminarily select the senior managing underwriter for the Series 2017 Bonds from among the underwriters used for the issuance of the Authority's Monroe Expressway Toll Revenue Bonds, Series 2016A and Series 2016C, which group of underwriters will be used for the sale of the Series 2017 Bonds;
- to engage other professionals as necessary to pursue preparations for issuance of the Series 2017 Bonds and to draft documents and other materials to present to this committee and/or the Board for its consideration as to issuance of the Series 2017 Bonds;
- to negotiate with bond insurance companies for insurance and/or surety policies with respect to the Series 2017 Bonds;
- to provide material to the North Carolina Local Government Commission as necessary in preparation for seeking its required approval of the issuance and sale of the Series 2017 Bonds;
- to seek appropriate ratings for the Series 2017 Bonds; and
- to take all other action in connection with the issuance of the Series 2017 Bonds as they may deem appropriate subject to the understanding stated above.